

November 21, 2017

FILE REF: R-2017-0216
WPDES Permit #: WI-0063533

Ex. 6 Personal Privacy (PP)

Central Sands Dairy LLC

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Bancroft, WI 54921

Subject: (Corrected from 11/20/2017) Conditional Approval Modification of Plans and Specifications for a Groundwater Monitoring Plan (Phase II) Ammonia Source Investigation Plan, at Central Sands Dairy, LLC, SW¼, Sec 12, T20N, R4E, Armenia Township, Juneau County

Dear Ex. 6 Personal Privacy (PP)

This letter is a corrected version of the letter dated November 20, 2017. The correction is the DNR Project # shown as underlined on this page.

The Division of External Services of the Wisconsin Department of Natural Resources (DNR) conditionally approves the Phase II Groundwater Monitoring Plan submitted under the signature of Robert Nauta, P.G., RJN Environmental Services, LLC (RJN), dated and received August 25, 2017. The plans and specifications were accompanied by a letter from David Crass, Michael Best & Friedrich (MBF) and were submitted in response to the Settlement Agreement dated July 27, 2017, item #8, that specifies submittal of a plan to investigate the source of ammonia in existing groundwater monitoring wells at the production area (site) of Central Sands Dairy (CSD), in accordance with s. NR 140.26, Wis. Adm. Code.

Upon the plan's submittal, DNR and CSD agreed that DNR would be allowed additional time to respond beyond the 30 days set forth in the Settlement Agreement to allow for a technical discussion about the ammonia source and investigation plan. DNR concluded that an additional piezometer was necessary next to CSD-7 to adequately investigate the ammonia source. Attorney David Crass, on behalf of CSD, later confirmed by telephone that CSD is amenable to installing the additional piezometer.

DNR agrees with the plan's proposal to continue monitoring the existing groundwater monitoring wells, and by Condition of Approval DNR is specifying that one additional groundwater monitoring well, designed as a piezometer, be installed to assist in identifying the ammonia source. The groundwater monitoring well name used herein (Piezometer T) is only for the purpose of communicating the requirements for it. CSD may name the well differently for identification and reporting purposes.

The Conditional Approval Modification herein modifies the Phase I Groundwater Monitoring Plan Approval dated September 26, 2014 (DNR Project # R-2014-0160) and the Phase II Groundwater Monitoring Plan Approval dated July 7, 2016 (DNR Project # R-2016-0111). Based on the schedules specified in the Settlement Agreement, DNR anticipates re-issuance of the WPDES Permit in early 2018. The additional monitoring well and related requirements are specified in the Conditions of Approval (below) and will also be specified in the re-issued WPDES Permit.

The plans and specifications were reviewed in accordance with s. 281.41 and ch. 283, Wis. Stats., and chs. NR 243, NR 214 and NR 140, Wis. Adm. Code. Construction is approved to commence for a period of two years from the approval date (also see Conditions of Approval).

Questions may be directed to DNR regional staff, Michelle Scarpace, or DNR engineer, Gretchen Wheat. Questions specific to the groundwater monitoring well placement, construction and sampling may also be directed to DNR hydrogeologist, Laura Chern. (Contact information for each of these DNR employees is provided in the "cc" list at the end of this letter.)

Background Information: CSD is an existing large Concentrated Animal Feeding Operation (CAFO) with a WPDES Permit. On July 7, 2016, the DNR issued a modified WPDES Permit to address groundwater monitoring, including requirements for the existing (Phase I) groundwater monitoring wells and additional (Phase II) groundwater monitoring wells. CSD filed for an appeal of the WPDES Permit, and the appeal was resolved by the Settlement Agreement.

The Approval dated July 7, 2016, required identification of septic drain field locations at the site. On July 13, 2016, DNR received a site map (submitted by Cameron Field, MBF) that identified locations of the site's four septic drain fields. No septic drain field is located east of the waste storage facility, or immediately upgradient of CSD-1D.

Conditions of Approval: The ammonia source investigation plan (DNR Project # R-2017-0216) is hereby approved in accordance with s. 281.41 and ch. 283, Wis. Stats., subject to applicable portions of chs. NR 243, NR 214 and NR 140, Wis. Adm. Code, and the following conditions.

1. **Additional Groundwater Monitoring Well Required:** In accordance with s. NR 243.15(7) and ch. NR 140, Wis. Adm. Code, and the Settlement Agreement, an additional groundwater monitoring well, designed as a piezometer (Piezometer T) shall be constructed at the site.
 - a. **Location:** Piezometer T shall be located adjacent to existing groundwater monitoring well CSD-7.
 - b. **Schedule:** In accordance with the Settlement Agreement, Item #11, Piezometer T shall be constructed within 60 days of the date of this Conditional Approval Modification, and monitoring of Piezometer T shall begin in the next subsequent quarterly monitoring. If possible, DNR encourages construction of Piezometer T in time for monitoring in the January 2018 quarterly monitoring round.
 - c. **Construction & Sampling Procedures:** Piezometer T construction and sampling procedures shall comply with the Workplan dated May 16, 2016, by Robert J Nauta, Hydrogeologist, RJN Environmental Services LLC, and the Conditions herein. (Language from the Workplan is included with the attached memo from Laura Chern.) In the case of conflict between the Workplan and the Conditions, the Conditions shall take precedence.
 - i. Piezometer T shall be constructed in accordance with ch. NR 141, Wis. Adm. Code, except that topsoil or native soil of a maximum thickness of 1 foot (instead of 2 inches) may be placed over the bentonite Ground Surface Seal.
 - ii. The bottom of the 5 foot well screen of Piezometer T shall be placed at an approximate elevation of 925 feet above mean sea level.
2. **Monitoring Frequency & Parameters:** Piezometer T shall be monitored at the frequency, and for the parameters, specified in the WPDES Permit for the existing groundwater monitoring wells.
3. **WPDES Permit Requirements Take Precedence:** In the case of conflict between the Conditions herein, and the WPDES Permit, the WPDES Permit shall take precedence.
4. **Approval Period:** In accordance with ss. NR 243.15(1)(a)1. and NR 108.04(2)d., Wis. Adm. Code, if construction is not commenced within 2 years from the approval date, the approval is void. If approval lapses by passage of time, a new approval must be obtained.
5. **Notification:** Prior to construction and when construction is complete, CSD shall notify the DNR regional contact and county contact listed in the cc list at the end of this letter. A minimum 24 hours advance notice shall be provided to allow for inspection during construction and development of the wells.
6. **Inspections:** During construction and development of groundwater monitoring wells, inspection and oversight shall be performed by a Wisconsin registered P.G. (Professional Geologist).


7. **Post-Construction Report:** Within 60 days of well installation, post-construction documentation shall be submitted under signature of a P.G. to the DNR for review. An electronic copy of the post-construction report shall be submitted using the DNR e-Permitting system, <http://dnr.wi.gov/permits/water/> (select DNR Project # R-2017-0216) and submit one paper copy to Laura Chern. The post-construction report shall be prepared in accordance with ch. NR 140, Wis. Adm. Code, and include the following.
- a. An as-built site map in accordance with s. NR 141.065, Wis. Adm. Code.
 - b. For each new groundwater monitoring well, CSD shall complete each of the following DNR forms:
 - i. DNR Form 4400-113A (Rev. 7-98) "Monitoring Well Construction".
 - ii. DNR Form 4400-113B (Rev. 7-98) "Monitoring Well Development".
 - iii. DNR Form 4400-122 (Rev. 7-98) "Soil Boring Log Information".
 - iv. DNR Form 4400-67 (Rev. 9-95) "Groundwater Monitoring Inventory".
 - v. DNR Form 4400-89 (Rev. 7-89) "Groundwater Monitoring Well Information".
 - c. CSD shall complete and submit DNR Form 3300-005 (Rev. 4-08) "Well/Drillhole/Borehole Filling and Sealing" for each borehole greater than 10 feet deep that cannot be developed into a well, and must be abandoned in accordance with s. NR 141.25, Wis. Adm. Code.


Limitation of Approval: The DNR reserves the right to order changes or additions should conditions arise making this necessary. This approval is not to be construed as a DNR determination on issuance of a Wisconsin Pollutant Discharge Elimination System Permit or opinion on the ability of the proposed system to comply with effluent limitations in a permit; compliance with the Wisconsin Environmental Policy Act; or approval for activities requiring a permit under ch. 30 or 31, Wis. Stats. Where necessary, plans and specifications should be submitted to the Department of Safety and Professional Services or other state or local agencies to ensure conformance with applicable codes or regulations of such agencies.

Tax Treatment: Tangible personal property, that becomes part of a waste treatment or pollution abatement plant or equipment, may be exempt from sales tax under s. 77.45(26), Wis. Stats. Similarly, property purchased or constructed as a waste treatment facility and used for industrial waste treatment may be exempt from general property taxes under s. 70.11(21), Wis. Stats. A prerequisite to exemption is filing a statement on prescribed forms. To obtain forms and information, please contact the Department of Revenue, P.O. Box 8933, Madison, WI 53708, or check their website <http://www.revenue.wi.gov/>.

Appeal Notice: If you believe that you have a right to challenge this decision, you should know Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to ss. 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file a petition with the appropriate circuit court and serve the petition on the Department. Petition for judicial review must name the Department of Natural Resources as the respondent. To request a contested case hearing pursuant to s. 227.42, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. Requests for contested case hearings must be made in accordance with s. NR 2.05(5), Wis. Adm. Code, and served on the Secretary in accordance with s. NR 2.03, Wis. Adm. Code. Filing a request for a contested case hearing does not extend the period for filing a petition for judicial review.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
For the Secretary


Mary Anne Lowndes
Chief, Runoff Management Section
Bureau of Watershed Management


Gretchen Wheat, P.E.
Engineer, Runoff Management Section
Bureau of Watershed Management

Encl: Memo from Laura Chern, to Jane Landretti and Michelle Scarpace, dated 10/26/2017,
Subject: "Ammonia Concentrations in CSD-1D – Source Investigation Plan, Central Sands Dairy,
Juneau County, Wisconsin submitted by Robert J Nauta, Hydrogeologist, RJN Environmental
Services LLC dated August 25, 2017"

Excerpt from Previously Approved Workplan, RJN Environmental Services LLC, dated
5/16/2016.

Email cc: Adam Onan – CSD
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Jane Landretti – DNR Madison
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Matthew Woodrow – DATCP
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CORRESPONDENCE/MEMORANDUM

DATE: October 26, 2017

TO: Jane Landretti – LS/8
Michelle Scarpace - Fitchburg

FROM: Laura Chern – DG/5 *jc*

SUBJECT: Ammonia Concentrations in CSD-1D – Source Investigation Plan, Central Sands Dairy, Juneau County, Wisconsin submitted by Robert J Nauta, Hydrogeologist, RJN Environmental Services LLC dated August 25, 2017

I have reviewed the Source Investigation Plan for Central Sands Dairy and recommend approval of the plan with the following conditions:

- Construction of an additional piezometer to be located next to CSD-7. The piezometer should be constructed as per ch. NR 141, Wis. Adm. Code with the five-foot well screen bottom placed at an elevation of approximately 925 feet below mean sea level. No additional workplan needs to be approved. Language from the workplan submitted May 16, 2016 by Robert J Nauta, Hydrogeologist, RJN Environmental Services LLC is included below and should be followed for construction and sampling of the new well. The additional piezometer should be constructed for the quarterly monitoring round in January of 2018, although accommodation should be made for winter weather.
- All wells should continue to be monitored as per the permit.

cc: MaryAnne Lowndes – WT/3
Bruce Rheineck – DG/5
Tom Bauman – WT/3
Gretchen Wheat – WT/3

Well Construction

All well construction will be performed in compliance with Wisconsin Administrative Code ch. NR 141. Well drilling and construction activities will be under the supervision of, and documented by, a qualified hydrogeologist. Drilling will be conducted using a truck-mounted hollow stem auger rig. Continuous split spoon samples will be collected and logged by RJN. Samples will be classified by grain size and color, using the Munsell color charts. The stratigraphy will be logged on WDNR form 4400-122.

Wells will be constructed of flush-threaded 2-inch inside diameter schedule 40 PVC. Screens will have factory-cut 0.01-inch slots. Water table wells will have 10-foot-long screens. The top of the screens will be set at 2 to 3 feet above the water table. Piezometers will have 5-foot-long screens, and will be set with the top of the screen 15 feet below the bottom of the adjacent water table well. An appropriately sized filter sand pack will be placed around and 2 feet above the well screen. A 2-foot, finer grained protective sand layer will be placed above the filter sand pack and a 5-foot bentonite seal will be placed above the protective sand layer. The remaining annulus will be filled to near ground surface with bentonite pellets. A lockable protective steel casing will be set to complete the well installation (see Figure 2).

Upon completion, each well will be developed by the well drilling contractor. The temperature, pH and conductivity will be measured and recorded after each borehole volume is removed. Purge water will be discharged to the ground surface, a minimum of 50 feet from the well. It is assumed that drill cuttings can be thin-spread in the areas of the individual wells.

Well construction and development will be documented on forms 4400-113A and 4400-113B, respectively. Well elevations will be surveyed by a Wisconsin-licensed land surveyor to within 0.01 foot, referenced to the national geodetic survey datum.

Within 60 days of construction of the monitoring network, an as-built plan will be submitted to the WDNR, along with construction, development and abandonment documentation (for well CSD-4).

Groundwater Sampling

All wells will be sampled in each sampling event. Wells will be purged using a low flow sampling technique. During purging, pH, temperature and conductivity will be measured after the removal of each well volume. The wells will be considered adequately purged when three consecutive readings provide results in which the following ranges have been established:

- pH: ± 0.1 units
- Temperature: ± 10 percent
- Conductivity: ± 5 percent

The total volume of water removed will be noted on the field sheets, as well as the observed color, turbidity and odor.

Once the parameters have stabilized, the sample will be collected in laboratory-supplied containers and immediately placed in an iced cooler. A duplicate sample will be collected from one well during each sample event, and a trip blank will be included.

Laboratory analytical parameters will include:

- Total dissolved solids
- Ammonia
- Chemical oxygen demand
- Total organic carbon
- Total Kjeldahl nitrogen
- Nitrate
- Total coliform (count)
- E. coli (count)
- Chloride
- Potassium

Sampling Schedule

Wells will be sampled on a quarterly basis as per the permit.